



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/797,794	03/10/2004	Kiyoshi Sato	9281-4755	4517

7590 10/17/2006  
Brinks Hofer Gilson & Lione  
P.O. Box 10395  
Chicago, IL 60610

EXAMINER

KLIMOWICZ, WILLIAM JOSEPH

ART UNIT	PAPER NUMBER
----------	--------------

2627

DATE MAILED: 10/17/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/797,794

Applicant(s)

SATO, KIYOSHI

Examiner

William J. Klimowicz

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 11 September 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) 3, 4, 6 and 10-14 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1, 2 and 7-9 is/are rejected.
- 7) ☒ Claim(s) 5 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 10 March 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

***Election/Restrictions***

Applicant's election of Group I, Specie I in the reply filed on September 11, 2006 is acknowledged.

On page 5 of the Response, the Applicant states:

In response to the Restriction/Election Requirement dated July 11, 2006, Applicant hereby elects Group I, which corresponds to Claims 1-14. Applicant also elects Specie I, which corresponds to at least Claims 1, 2, 5 and 7 - 9. Applicant submits that at least Claims 1 is generic. Accordingly, Claims 3 - 4, 6, and 10 - 14 have been withdrawn.

Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claims 3, 4, 6 and 10-14 are withdrawn from further consideration pursuant to 37 CFR 1.142(b) as being drawn to a nonelected invention, there being no allowable generic or linking claim. Election was made **without** traverse in the reply filed on September 11, 2006

Applicant has voluntarily cancelled claims 15-23.

***Claim Objections***

Claim 1 is objected to because of the following informalities:

With regard to claim 1 (line 13), the phrase "from upper surface" should be changed to the phrase --from an upper surface-- or --from the upper surface--. Appropriate correction is required.

***Claim Rejections - 35 USC § 112***

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 8 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to claim 8, the phrase “wherein the raised layer intersects under a plurality of the first coil pieces” is vaguer and ambiguous, in light of the Applicant’s written description. Moreover, it is unclear as to the metes and bounds of the claim. What does the raised layer intersect with?

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2 and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by Shibayama et al. (JP 07-225918 A).

As per claim 1, Shibayama et al. (JP 07-225918 A) discloses a thin-film magnetic head (e.g., Fig. 1) comprising: a lower core layer (1) formed so as to extend in a height direction from a surface opposing a recording medium (not shown); a magnetic layer (7) connected to the

Art Unit: 2627

lower core (1) layer directly or indirectly at a position spaced from the opposing surface in the height direction by a predetermined distance (to complete the requisite closed flux path); and a coil layer (5) toroidally winding around the magnetic layer (7), wherein the toroidal coil layer (5) is connected to a plurality of first coil pieces (see each winding as seen in Fig. 1, in conjunction with the lower piece of (5) formed into the recess of (1) as seen in Fig. 2) formed between the lower core layer (1) and the magnetic layer (7) and a plurality of second coil pieces (see each winding as seen in Fig. 1, in conjunction with the upper flat piece of (5) as seen in Fig. 2) formed on the magnetic layer (7), and wherein the upper surfaces of the first coil pieces (lower portion of (5)) are covered with an insulating layer (4) other than connection surfaces (surfaces of the lower (5) which directly contact the portions of the upper (5) as seen in Fig. 2) to the second coil pieces (upper (5)), the connection surfaces of the first coil pieces (lower (5)) being raised upward and exposed from the upper surface of the insulating layer (4) so that the second coil pieces (upper (5)) are formed in contact with the connection surfaces of the first coil pieces (lower (5)) - see Fig. 2.

As per claim 2, further comprising a raised layer (lower insulating layer (4)) provided on the lower core layer (1) at a position spaced in a track width direction from the center of the lower core layer (lowermost flat portion of lower (5) as seen in Fig. 2) in the track width direction (left-to-right as seen in Fig. 2), wherein part of the first coil pieces (lower (5)) is mounted on the raised layer (at the two distal ends thereof, as seen in Fig. 2), part of the upper surfaces of the first coil pieces (lower (5)) being exposed from the upper surface of the insulating layer (4) at the position on that the first coil pieces mount, so that the exposed surface

Art Unit: 2627

becomes the connecting surface (surface of lower (5) which directly contacts the upper (5) as seen in Fig. 2).

As per claim 7, wherein the upper surface of the insulating layer (4) and the connection surfaces of the first coil pieces (lower (5)) are an identical flattening surface - see Fig. 2.

Insofar as claim 8 can be understood, wherein the raised layer (4) intersects under a plurality of the first coil pieces -e.g., "intersects" with upper and lower portions of layer (4) - see Fig. 2.

As per claim 9, wherein the raised layer (upper portions of (4)) is arranged under each of the first coil pieces (see Fig. 1 and Fig. 2).

#### ***Allowable Subject Matter***

Claim 5 is *currently* objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

#### ***Conclusion***

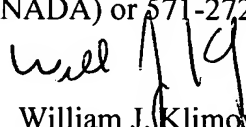
The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to William J. Klimowicz whose telephone number is (571) 272-7577. The examiner can normally be reached on Monday-Thursday (6:30AM-5:00PM).

Art Unit: 2627

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Hoa Thi Nguyen can be reached on (571) 272-7579. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

  
William J. Klimowicz  
Primary Examiner  
Art Unit 2627

WJK